

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/837,457	PHADNIS ET AL.
	Examiner	Art Unit
	John Pezzlo	2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to application filed 19 April 2001.
2.  The allowed claim(s) is/are 1-25.
3.  The drawings filed on 19 April 2001 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 25 June 2001
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.



**JOHN PEZZLO**  
**PRIMARY EXAMINER**

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 1-25 are allowable over the prior art of record.

### ***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance: Applicants have claimed uniquely distinct features in the instant invention, which are not found in the prior art, either singularly or in combination. Each independent claim identifies the following uniquely distinct features;

1. Regarding claim 1 – A method of providing different quality of services (QoS) in a communication network to data related to different point-to-point sessions, said method comprising: provisioning in a first aggregation device a plurality of virtual circuits, said plurality of virtual circuits being provisioned between said first aggregation device and a second aggregation device located in said communication network, each of said plurality of virtual circuits being provisioned to provide a different QoS, receiving in said first aggregation device a plurality of datagrams, each of said plurality of datagrams being related to a corresponding one of a plurality of point-to-point sessions, determining a point-to-point session to which each of said plurality of datagrams relates to, assigning each of said plurality of datagrams to one of said plurality of virtual circuits depending on the QoS desired for the corresponding point-to-point

session, and sending the data in each of said datagrams to said second aggregation device in the form of a packet on a corresponding assigned virtual circuit, whereby different point-to-point sessions receive different QoS.

2. Regarding claim 8 – A first aggregation device for providing different quality of services (QoS) in a communication network to data related to different point-to-point sessions, said aggregation device comprising: means for provisioning a plurality of virtual circuits, said plurality of virtual circuits being provisioned between said first aggregation device and a second aggregation device located in said communication network, each of said plurality of virtual circuits being provisioned to provide a different QoS, means for receiving in said first aggregation device a plurality of datagrams, each of said plurality of datagrams being related to a corresponding one of a plurality of point-to-point sessions, means for determining a point-to-point session to which each of said plurality of datagrams relate to, means for assigning each of said plurality of datagrams to one of said plurality of virtual circuits depending on the QoS desired for the corresponding point-to-point session; and means for sending the data in each of said datagrams to said second aggregation device in the form of a packet on a corresponding assigned virtual circuit, whereby different point-to-point sessions receive different QoS.

3. Regarding claim 12 – A first aggregation device for providing different quality of services (QoS) in a communication network to data related to different point-to-point sessions, said aggregation device comprising: an inbound interface receiving a plurality of datagrams, each of said plurality of datagrams being related to a corresponding one of a plurality of point-to-

point sessions, a memory indicating one of a plurality of virtual circuits to transfer data related to each of said plurality of point-to-point sessions, each of said plurality of virtual circuits being provisioned to provide a different QoS between said first aggregation device and a second aggregation device on said communication network, a classifier examining each of said plurality of datagrams to determine the specific point-to-point session to which each datagram relates to, an encapsulator generating a packet corresponding to each of said plurality of datagrams, a header of each packet containing a virtual circuit identifier identifying one of said plurality of virtual circuits, wherein said one of said plurality of virtual circuits is determined based on a QoS desired for a corresponding point-to-point session, and an outbound interface sending said packet corresponding to each of said plurality of datagrams on a virtual circuit specified by the corresponding header, whereby the data related to different point-to-point sessions receives different QoS.

4. Regarding claim 20 - A computer readable medium carrying one or more sequences of instructions for causing a first aggregation device to provide different quality of services (QoS) in a communication network to data related to different point-to-point sessions, wherein execution of said one or more sequences of instructions by one or more processors contained in said first aggregation device causes said one or more processors to perform the actions of: provisioning in a first aggregation device a plurality of virtual circuits, said plurality of virtual circuits being provisioned between said first aggregation device and a second aggregation device located in said communication network, each of said plurality of virtual circuits being provisioned to provide a different QoS, receiving in said first aggregation device a plurality of

datagrams, each of said plurality of datagrams being related to a corresponding one of a plurality of point-to-point sessions, determining a point-to-point session to which each of said plurality of datagrams relates to, assigning each of said plurality of datagrams to one of said plurality of virtual circuits depending on the QoS desired for the corresponding point-to-point session, and sending the data in each of said datagrams to said second aggregation device in the form of a packet on a corresponding assigned virtual circuit, whereby different point-to-point sessions receive different QoS..

The closest prior art, either singularly or in combination, fail to anticipate or render the above limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

***Conclusion***

Claims 1-25 being allowable, **Prosecution On The Merits Is Closed** in this application.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Lothberg et al. (US 6,804,776 B1) discloses a method for universal transport encapsulation for IP network communications.
2. Modarressi et al. (US 6,667,971 B1) discloses a system and method for enhanced ADSL architecture and service concepts.
3. Feder et al. (US 6,512,754 B2) discloses PPP protocol encapsulation in Ethernet frame.
4. Novick et al. (US 6,404,737 B1) discloses a multi-tiered shaping allowing both shaped and unshaped virtual circuits to be provisioned in a single virtual path.
5. Araujo et al. (US 6,118,785) discloses a PPP protocol with a signaling channel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (571) 272-3090. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

or faxed to:

(703) 872-9306

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Jefferson Building

500 Dulany Street

Alexandria, VA.

John Pezzlo

28 January 2005



JOHN PEZZLO  
PRIMARY EXAMINER